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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,872	05/31/2001	Richard P. Mackey	10559-389001	1080

20985 7590 01/30/2004

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EXAMINER	
PUENTE, EMERSON C	
ART UNIT	**PAPER NUMBER**
2113	

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/872,872	Applicant(s) MACKEY ET AL.	
	Examiner Emerson C Puente	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This action is made Non-Final. Claims 1-16 have been examined.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 15 and 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 15, "generating two output signals to the memory controller based on the delay signal" is inconsistent with the specification. In the specification, applicant discloses transmitting a reset signal and a power delay signal to the memory controller based on reset condition (see page 3 bottom full paragraph).

In regards to claim 16, the phrase "preventing initiating the data retention routine if the reset signal is not de-asserting for a predetermined period of time" is contradictory to the specification. In the specification, applicant disclose "if the reset signal is detected long enough and either a power failure or an external reset event is detected, the memory controller self refresh state machine will execute. Once the self refresh sequence has been performed, the memory controller would enter the reset state" (see page 4 top paragraph) indicating initiating the data retention routine if the reset signal is not de-asserting for a predetermined period of time,

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,182,687 of Campbell et al. referred hereinafter "Campbell".

In regards to claim 1, Campbell discloses:

detecting a reset condition (see column 17 lines 35-42);

verifying a memory controller is initialized (see column 17 lines 42 to column 18 lines 15); and

placing a memory system into a retention state (see column 18 lines 9-15 and 35-50).

In regards to claim 2, Campbell discloses verifying the memory controller is initialized by delaying a reset signal (see column 18 lines 9-15).

In regards to claim 3, Campbell discloses monitoring the voltage level of a system to determine a power (see column 17 lines 35-42).

In regards to claim 4, Campbell discloses generating a reset condition when either a power failure or a reset request occurs (see column 17 lines 35-42 and column 18 lines 35-40).

In regards to claim 5, Campbell discloses verifying the reset request does not occur prior to initialization (see column 18 lines 9-15).

In regards to claim 6, Campbell discloses detecting the reset condition and verifying the memory controller is initialized external to the memory controller (see column 18 lines 9-15).

In regards to claim 7, Campbell discloses

a power delay circuit external to a memory controller, wherein the power delay circuit instructs the memory system to run a retention routine during a power failure or reset condition. Campbell discloses a power monitor circuit (see figure 9a item 230) that instructs a reset after power failure or reset condition (see column 17 lines 53-55).

In regards to claim 8, Campbell discloses a power fail controller, which prevents the retention routine from executing when the memory system is not configured. Campbell discloses a reset circuit that provides a delay reset signal enabling a power down routine before resetting (see figure 9a item 242 and column 18 lines 9-15).

In regards to claim 9, Campbell discloses wherein the power delay circuit outputs a reset signal if either a power failure or a system reset signal is detected (see column 17 lines 35-42 and column 18 lines 35-40).

In regards to claim 10, Campbell discloses wherein the power delay circuit outputs a delay signal when the output reset signal is caused by a system reset signal. Campbell discloses a reset circuit that provides a delayed reset signal, indicating a delay signal when the output reset signal is caused by a system reset signal (see column 17 lines 53 to column 18 lines 15).

In regards to claim 11, Campbell discloses wherein the power delay circuit monitors a voltage detector to detect a power failure (see column 17 lines 35-42 and column 18 lines 35-40).

In regards to claim 12, Campbell discloses the power fail controller may be internal to the memory controller (see figure 9a item 242).

In regards to claim 13, Campbell discloses

detecting either a power failure or reset signal (see column 17 lines 38-42);

generating a delay signal based on the reset signal (see column 18 lines 9-15); and

initiating a data retention routine if the delay signal indicates the memory system is initialized. Campbell discloses resetting after a power down routine, indicating initiating a data retention routine if the delay signal indicates the memory system is initialized (see column 18 lines 9-15 and 35-50).

In regards to claim 14, Campbell discloses monitoring the voltage level of a system to determine a power failure (see column 17 lines 35-42 and column 18 lines 35-40).

In regards to claim 15, Campbell discloses generating two output signals to the memory controller based on the delay signal (see figure 9a item 270 and 234 and column 17 lines 40-50 and column 18 lines 5-15).

In regards to claim 16, Campbell discloses preventing initiating the data retention routine if the reset signal is not de-asserted for a predetermined period of time (see column 17 lines 53 to column 18 line 15).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See Form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emerson C Puente whose telephone number is (703) 305-8012. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5631.

Emerson Puente
1/23/04

ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
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